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## ABSTRACT

Hydrophobic silica fine powder is produced by  
5 pyrolyzing a silane compound to form a silica fine powder  
and hydrophobizing the silica fine powder with an  
organohalosilane in a fluidization vessel. Hydrophobized  
silica fine powder which flies out of the fluidization  
vessel is collected with a cyclone and bag filter which are  
10 held at a temperature of 100-500°C. An apparatus for  
carrying out the process is also provided. Under simple  
controlled conditions that involve holding the cyclone and  
bag filter for recovering fugitive silica from the  
fluidization vessel to temperatures of 100-500°C, the method  
15 and apparatus are able to recover essentially 100% of  
fugitive silica, thus increasing yield of the product and  
alleviating the burden on waste gas treatment.